

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION

ORDER NO. 93-69  
FOR  
OAK CREST ESTATES, INC.  
AND  
RAINBOW MUNICIPAL WATER DISTRICT  
OAK CREST TREATMENT PLANT  
SAN DIEGO COUNTY

The California Regional Water Quality Control Board, San Diego Region (hereinafter Regional Board) finds that:

1. On February 20, 1967, this Regional Board adopted Resolution No. 67-R1, "A Resolution Prescribing Interim Requirements for the Discharge of Domestic Wastes by Rainbow Valley Mobile Home Park Located in Section 11, T9S, R3W, SBBM." Resolution No. 67-R1 established waste discharge requirements for the disposal of up to 0.012 million gallons per day of treated domestic wastewater from the Rainbow Valley Mobile Home Park by spray irrigation.
2. Resolution No. 67-R1 was superceded by Order No. 81-17, Waste Discharge Requirements for Oak Crest Mobile Home Park Replacement Wastewater Treatment and Disposal Facilities, San Diego County which was updated by Order No. 87-45, Waste Discharge Requirements for Oak Crest Estates, Inc. and Rainbow Municipal Water District, Oak Crest Treatment Plant, San Diego County. Order No. 87-45 included a provision that established a time schedule for Oak Crest Estates, Inc. and Rainbow Municipal Water District (hereinafter discharger) to determine if the discharge from the Oak Crest Treatment Plant was causing the Basin Plan objectives for ground water to be exceeded.
3. As part of the Fiscal Year 1993/94 Waste Discharge Order Update Program, Order No. 87-45 has been reviewed by Regional Board staff in accordance with criteria established in the Administrative Procedures Manual adopted by the State Water Resources Control Board. As a result of this review, modifications have been incorporated into this Order. This Order makes changes to the Findings, Discharge Specifications, Reporting Requirements and Monitoring and Reporting Program of Order No. 87-45.
4. Wastewater treatment facilities and disposal facilities for the Oak Crest Mobile Home Park are located in Rainbow Valley in the NE1/4 of Section 11, T9S, R3W, SBB&M, approximately one-fourth mile west of Interstate 15 in the DeLuz Hydrographic Subarea of the DeLuz Hydrographic Subunit of the Santa Margarita Hydrographic Unit.

5. The capacity of the wastewater treatment facilities is 0.012 MGD and serves the existing 112 units within the mobile home park. The treatment facility is an extended aeration package treatment plant which produces secondary effluent. Two concrete lined storage ponds with a total capacity of 1.2 million gallons have been constructed. Effluent is not chlorinated before discharge to the disposal area. Wastewater is disposed of by spray irrigation on a total area of approximately 5 acres. The disposal area has been fenced to prevent public access.
6. Sewage sludge is currently being dried on-site in two unlined drying beds. The dried sludge is then composted and stored on-site. The discharger has requested permission from this Regional Board to use the composted sludge as mulch around landscaping in the mobile home park. This Order will require the discharger to submit a technical report certifying that the treatment, storage and disposal of sludge is in compliance with 40 CFR 503.
7. Potable water is supplied to the Oak Crest Mobile Home Park by Rainbow Municipal Water District. Partial results of analyses of the existing water supply between 1988 and 1992 are as follows:

Constituent	Unit	Range	Mean
Total Dissolved Solids	mg/L	441 - 660	555.5
Chloride	mg/L	61 - 91	81.10
Sulfate	mg/L	144 - 270	209.3
Sodium	mg/L	71 - 103	86.88
Fluoride	mg/L	.17 - .35	.26
Boron	mg/L	0 - .15	.04

8. As prescribed by Order No. 87-45, the discharger has submitted self-monitoring reports concerning the quality of the discharge. A summary of the data submitted from 1988-1992 is as follows:

Constituent	Unit	Range	Mean
Biochemical Oxygen Demand	mg/L	3 - 51	10.47
Total Suspended Solids	mg/L	3 - 38	12.47
Total Dissolved Solids	mg/L	683 - 1098	805.8
Chloride	mg/L	70.7 - 124	102.23
Sulfate	mg/L	102.5 - 281.6	241.65
Sodium	%	33.1 - 54.8	41.68
Fluoride	mg/L	.26 - 1.48	.53
Boron	mg/L	.05 - .89	.62
pH	Units	6.48 - 7.3	7.14

9. The Comprehensive Water Quality Control Plan Report, San Diego Region (9) (Basin Plan) was adopted by this Regional Board on March 17, 1975; approved by the State Water Resources Control Board on March 20, 1975; and updated by the Regional Board on February 27, 1978; March 23, 1981; January 24 and October 3, 1983; August 27, 1984, and December 15, 1985. The 1978, 1981, 1983, 1984 and 1985 updates were subsequently approved the State Board.
10. The Basin Plan established the following beneficial uses for the surface waters of the DeLuz Hydrographic Subunit.
  - a. Municipal and domestic supply
  - b. Agricultural supply
  - c. Industrial service supply
  - d. Water contact recreation
  - e. Noncontact recreation
  - f. Warm fresh-water habitat
  - g. Cold fresh-water habitat
  - h. Wildlife habitat
11. The Basin Plan established the following beneficial uses for the ground waters of the DeLuz Hydrographic Subunit.
  - a. Municipal and domestic supply
  - b. Agricultural supply
  - c. Industrial service supply
  - d. Ground water recharge
12. The Basin Plan established the following water quality objectives for the DeLuz Hydrographic Subunit of the Santa Margarita Hydrographic Unit (2.20):

Constituent	Concentration not to be exceeded more than 10 percent of the time during any one year period			
	Surface Water		Ground Water	
Total Dissolved Solids	500	mg/L	500	mg/L
Chloride	250	mg/L	250	mg/L
Percent Sodium	60	%	60	%
Sulfate	250	mg/L	250	mg/L
Nitrogen and Phosphorus	*		- - -	-
Nitrate	- - -	-	10	mg/L
Iron	0.3	mg/L	0.3	mg/L
Manganese	0.05	mg/L	0.05	mg/L
Methylene Blue Active Substance	0.5	mg/L	0.5	mg/L
Boron	0.5	mg/L	0.5	mg/L
Odor	None		None	
Turbidity	20	NTU	5	NTU
Color	20	Units	15	Units
Fluoride	1.0	mg/L	1.0	mg/L

- \* Concentrations of nitrogen and phosphorus, by themselves or in combination with other nutrients, shall be maintained at levels below those which stimulate algae and emergent plant growth. Threshold total phosphorus (P) concentrations shall not exceed 0.05 mg/L in any stream at the point where it enters any standing body of water, nor 0.025 mg/L in any standing body of water. A desired goal in order to prevent plant nuisances in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10 percent of the time unless studies of the specific water body in question clearly show that water quality objectives changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1 shall be used.

13. The Basin Plan contains the following prohibitions applicable to the proposed discharge:

"Discharge of treated or untreated sewage or industrial wastes to a natural watercourse upstream of surface storage or diversion facilities used for municipal supply is prohibited."

"Discharge of treated or untreated sewage or industrial wastewater, exclusive of cooling water or other waters which are chemically unchanged, to a watercourse, is prohibited except in cases where the quality of said discharge complies with the receiving body's water quality objective."

"Discharging of treated or untreated sewage or industrial wastes in such a manner or volume as to cause sustained surface flow or ponding on lands not owned or under the control of the discharger is prohibited except to cases defined in the previous paragraph and in cases in which the responsibility for all downstream adverse effects is accepted by the discharger."

"The dumping or deposition of oil, garbage, trash or other solid municipal, industrial or agricultural waste directly into inland water or watercourses or adjacent to the watercourses in any manner which may permit its being washed into the watercourse is prohibited."

"Dumping or deposition of oil, garbage, trash or other solid municipal, industrial or agricultural waste into natural or excavated sites below historic water levels or deposition of soluble industrial wastes at any site is prohibited, unless such site has been specifically approved by the Regional Board for that purpose."

14. As reported in Finding No. 10, the average concentration of total dissolved solids and boron in the effluent from the Oak Crest Mobile Home Park treatment plant exceeds the Basin Plan groundwater objectives described in above Finding No. 12. The potential change to groundwater quality in the Santa Margarita Hydrographic Unit that may result from a discharge of treated wastewater with high concentrations of these constituents are difficult to quantify. However, because of its minor flow volume, any change to the groundwater quality caused by the discharge would be localized in nature and would not cause degradation to the overall groundwater quality in the basin and will be consistent with the Basin Plan.
15. This Order establishes discharge specifications for total dissolved solids and boron that can be achieved by the discharger with the implementation of an effective source control program. Source control measures may include restrictions on self-regeneration water softeners, types of detergents, the discharge of pool filter backwash water and other measures. Implementation of these measures by the discharger will mitigate potential impacts to the groundwater basin and result in reasonable protection of water quality.

16. The Oak Crest treatment plant generates sewage sludge and is therefore subject to Part 503, Subchapter O, Chapter I of Title 40 of the Code of Federal Regulations.
17. At the time of adoption of this Order, the State of California sludge regulatory program had not been approved by the Environmental Protection Agency (EPA). Consequently, the permitting authority for Part 503 permits is the EPA Regional Office. The deadline for Oak Crest Estates, Inc. and Rainbow Municipal Water District to submit a permit application to EPA is February 19, 1994.
18. The Regional Board, in establishing the requirements contained herein, considered factors including, but not limited to, the following:
  - a. Beneficial uses to be protected and the water quality objectives reasonable required for that purpose;
  - b. Other waste discharges;
  - c. The need to prevent nuisance;
  - d. Past, present, and probable future beneficial uses of water;
  - e. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto;
  - f. Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area;
  - g. Economic considerations; and
  - h. The need for developing housing within the region.
22. The Regional Board has considered all water resources related environmental factors associated with the proposed discharge of waste.
23. The Regional Board has notified the discharger and all known interested parties of the intent to prescribe waste discharge requirements for the proposed discharge.
24. The Regional Board in a public meeting heard and considered all comments pertaining to its proposed action.

25. The Oak Crest treatment facility is an existing facility and as such is exempt from the provisions of the California Environmental Quality Act, in accordance with Title 14, California Administrative Code, Chapter 3, Article 18, Section 15261.

IT IS HEREBY ORDERED, that Oak Crest Estates, Inc. and Rainbow Municipal Water District, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. PROHIBITIONS

1. Discharges of wastes, including windblown spray and runoff of effluent applied for irrigation to lands which have not been specifically described in the report of waste discharge and for which valid waste discharge requirements are not in force are prohibited.
2. The discharge of any radiological, chemical or biological warfare agent, or high-level radiological waste is prohibited.
3. Storage, use and/or disposal of wastes in a manner that would result in ponding or surfacing of wastes on lands beyond the disposal area, as described in the findings of this Order, is prohibited.
4. The discharge of wastewater shall not:
  - a. Cause the occurrence of coliform or pathogenic organisms in waters pumped from the basin;
  - b. Cause the occurrence of objectionable tastes and odors in waters pumped from the basin;
  - c. Cause waters pumped from the basin to foam;
  - d. Cause the presence of toxic materials in waters pumped from the basin;
  - e. Cause the pH of waters pumped from the basin to fall below 6.0 or rise above 9.0;
  - f. Cause this Regional Board's objectives for the ground or surface waters of the DeLuz Hydrographic Subunit as established in the Basin Plan, to be exceeded;

- g. Cause odors, septicity, mosquitos or other vectors, weed growth or other nuisance conditions in any inland watercourse;
  - h. Cause a surface flow recognizable as sewage in any inland water course;
  - i. Cause a pollution, contamination or nuisance or adversely affect beneficial uses of the ground or surface waters of the DeLuz Hydrographic Subunit as established in the Basin Plan.
- 5. A 30-day average wastewater flowrate at the Oak Crest treatment plant in excess of 0.012 MGD is prohibited unless the discharger obtains revised waste discharge requirements that provide for the proposed change.
  - 6. Odors, vectors, and other nuisances of sewage or sewage sludge origin beyond the limits of the treatment plant site or disposal area are prohibited.
  - 7. The discharge of waste in a manner other than as described in the findings of this Order is prohibited unless the discharger obtains revised waste discharge requirements that provide for the proposed change.
  - 8. The discharge of treated or untreated wastewater to the Santa Margarita River or its tributaries is prohibited.
  - 9. Disposal of wastewater to land other than as authorized by waste discharge requirements issued by this Regional Board is prohibited. Disposal of wastewater to waters of the United States other than as authorized by an NPDES permit issued by this Regional Board is prohibited.

**B. DISCHARGE SPECIFICATIONS**

- 1. The discharge of an effluent to the wastewater irrigation area containing pollutants in excess of the following effluent limitations is prohibited:



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Constituent	Unit	Daily Maximum	12-Month Average
Biochemical Oxygen Demand	mg/L	45	--
Total Suspended Solids	mg/L	45	--
Total Dissolved Solids	mg/L	300 *	1000
Chloride	mg/L	100 *	150
Sulfate	mg/L	100 *	250
Boron	mg/L	--	0.8

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\* Increment in effluent over supply water.

3. All waste treatment, containment and disposal facilities (including storage ponds and percolation ponds) with the exception of irrigation areas, shall be protected against 100-year peak stream flows as defined by the San Diego County flood control agency.
4. All waste treatment, containment and disposal facilities (including storage ponds and percolation ponds), with the exception of irrigation areas, shall be protected against erosion, overland runoff, and other impacts resulting from a 100-year frequency 24-hour storm.
5. Effluent storage facilities shall be designed, construction, operated, and maintained so as to prevent surfacing of wastes on property not owned or controlled by the discharger. Surface runoff of any wastes which surface on property owned or controlled by the discharger onto property not owned or controlled by the discharger shall be prevented.
6. The disposal of sewage sludge shall be at a municipal solid waste landfill permitted to accept sewage sludge or at a site that has been approved by the Regional Board Executive Officer.

#### C. PROVISIONS

1. Neither the treatment nor the discharge of waste shall create a pollution, contamination or nuisance, as defined by Section 13050 of the California Water Code.

2. The discharger must comply with all conditions of this Order. Any noncompliance with this Order constitutes a violation of the California Water Code and is grounds for (a) enforcement action; (b) termination, revocation and reissuance, or modification of this Order; or (c) denial of a report of waste discharge in application for new or revised waste discharge requirements.
3. In an enforcement action, it shall not be a defense for the discharger that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with this Order. Upon reduction, loss or failure of the treatment facility, the discharger shall, to the extent necessary to maintain compliance with this Order, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided. The provision applies for example, when the primary source of power of the treatment facility fails, is reduced, or is lost.
4. The discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.
5. The discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the discharger to achieve compliance with conditions of this Order. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Order.
6. This Order may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:
  - a. Violation of any terms or conditions of this Order;
  - b. Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts; or
  - c. A change in any condition that requires either a

temporary or permanent reduction or elimination of the authorized discharge.

The filing of a request by the discharger for the modification, revocation and reissuance, or termination of this Order, or notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

7. This Order is not transferrable to any person except after notice to the Executive Officer. The Regional Board may require modification or revocation and reissuance of this Order to change the name of the discharger and incorporate such other requirements as may be necessary under the California Water Code. The discharger shall submit notice of any proposed transfer of this Order's responsibility and coverage to a new discharger as described under Reporting Requirement E.3.
8. This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the discharger from liability under federal, state or local laws, nor create a vested right for the discharger to continue the waste discharge.
9. The discharger shall allow the Regional Board, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:
  - a. Enter upon the discharger's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and,
  - d. Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order or as otherwise authorized by the California Water Code, any substances or parameters at any location.

10. A copy of this Order shall be maintained at the Oak Crest treatment plant and shall be available to operating personnel at all times.
11. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.

**B. REPORTING REQUIREMENTS**

1. The discharger shall file a new Report of Waste Discharge at least 120 days prior to the following:
  - a. Addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the wastes.
  - b. Significant change in the treatment or disposal method (e.g., change in the method of treatment which would significantly alter the nature of the waste.)
  - c. Change in the disposal area from that described in findings of this Order.
  - d. Increase in flow beyond that specified in this Order.
  - e. Other circumstances which result in a material change in character, amount, or location of the waste discharge.
  - f. Any planned change in the regulated facility or activity which may result in noncompliance with this Order.
2. The discharger shall furnish to the Executive Officer of this Regional Board, within a reasonable time, any information which the Executive Officer may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The discharger shall also furnish to the Executive Officer, upon request, copies of records required to be kept by this Order.

3. The discharger must notify the Executive Officer, in writing at least 30 days in advance of any proposed transfer of this Order's responsibility and coverage to a new discharger. The notice must include a written agreement between the existing and new discharger containing a specific date for the transfer of this Order's responsibility and coverage between the current discharger and the new discharger. This agreement shall include an acknowledgement that the existing discharger is liable for violations up to the transfer date and that the new discharger is liable from the transfer date on.
4. The discharger shall comply with the attached Monitoring and Reporting Program No. 93-69, and further revisions thereto as specified by the Executive Officer. Monitoring results shall be reported at the intervals specified in Monitoring and Reporting Program No. 93-69.
5. By January 30, 1994, the discharger shall submit a technical report discussing the treatment, storage and disposal of sewage sludge generated by the Oak Crest treatment facility. If sludge is disposed at a site other than a municipal solid waste landfill, the discharger shall submit a certification statement from a licensed civil engineer that the disposal operation is in full compliance with 40 CFR 503.
6. Where the discharger becomes aware that it failed to submit any relevant facts in a Report of Waste Discharge or submitted incorrect information in a Report of Waste Discharge or in any report to the Regional Board, shall promptly submit such facts or information.
7. If a need for a discharge bypass is known in advance, the discharger shall submit prior notice and, if at all possible, such notice shall be submitted at least 10 days prior to the date of the bypass.
8. The discharger shall report any noncompliance which may endanger health or the environment. Any such information shall be provided orally to the Executive Officer within 24 hours from the time the discharger becomes aware of the circumstances. A written submission shall also be provided within five days of the time the discharger becomes aware of the circumstances. The written noncompliance and its cause, the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to

reduce, eliminate, and prevent recurrence of the noncompliance. The Executive Officer, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours. The following occurrence(s) must be reported to the Executive Officer within 24 hours;

- a. Any bypass from any portion of the treatment facility.
  - b. Any discharge of treated or untreated wastewater resulting from sewer line breaks, obstruction, surcharge or any other circumstances.
  - c. Any treatment plant upset which causes the effluent limitations of this Order to be exceeded.
9. All applications, reports or information submitted to the Executive Officer shall be signed and certified as follows:
- a. The Report of Waste Discharge shall be signed as follows:
    - (1) For a corporation - by a principal executive officer of at least the level of vice-president.
    - (2) For a partnership or sole proprietorship - by a general partner or the proprietor, respectively.
    - (3) For a municipality, state, federal or other public agency - by either a principal executive officer or ranking elected official.
  - b. All other reports required by this Order and other information required by the Executive Officer shall be signed by a person designated in paragraph (a) of this provision, or by a duly authorized representative of that person. An individual is a duly authorized representative only if:
    - (1) The authorization is made in writing by a person described in paragraph (a) of this provision;
    - (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated

facility or activity; and

- (3) The written authorization is submitted to the Executive Officer.

- c. Any person signing a document under this Section shall make the following certification: .

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

10. The discharger shall submit reports required under this Order, or other information required by the Executive Officer, to:

Executive Officer  
California Regional Water Quality Control Board,  
San Diego Region  
9771 Clairemont Mesa Blvd., Suite B  
San Diego, CA 92124

#### E. NOTIFICATIONS

1. California Water Code Section 13263(g) states:

"No discharge of waste into waters of the state, whether or not such discharge is made pursuant to waste discharge requirements shall create a vested right to continue such discharge. All discharges of waste into waters of the state are privileges, not rights."

2. These requirements have not been officially reviewed by the United States Environmental Protection Agency and are not issued pursuant to Section 402 of the Clean Water Act.
3. The California Water Code provides that any person who intentionally or negligently violates any waste discharge requirements issued, reissued, or amended by this Regional Board is subject to a civil monetary remedy of up to 20 dollars per gallon of waste discharged or, if a cleanup and abatement order is issued, up to 15,000

dollars per day of violation or some combination thereof.

4. The California Water Code provides that any person failing or refusing to furnish technical or monitoring program reports, as required under this Order, or falsifying any information provided in the monitoring reports is guilty of a misdemeanor.
5. This Order becomes effective on the date of adoption by the Regional Board.
6. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 87-45. Order No. 87-45 is hereby rescinded when this Order becomes effective.

I, Arthur L. Coe, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on September 20, 1993.

  
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ARTHUR L. COE  
Executive Officer



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION

MONITORING AND REPORTING PROGRAM NO. 93-69  
FOR  
OAK CREST ESTATES, INC.  
AND  
RAINBOW MUNICIPAL WATER DISTRICT  
OAK CREST TREATMENT PLANT  
SAN DIEGO COUNTY

A. MONITORING PROVISIONS

1. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this Order and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the Executive Officer.
2. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than  $\pm 5$  percent from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration and operation of acceptable flow measurement devices can be obtained from the following references:
  - a. "A Guide to Methods and Standards for the Measurement of Water Flow," U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 421, May 1975, 97 pp. (Available from the U.S. Government Printing Office, Washington, D.C. 20402. Order by SD Catalog No. C13.10:421.)
  - b. "Water Measurement Manual," U.S. Department of Interior, Bureau of Reclamation, Second Edition, Revised Reprint, 1974, 327 pp. (Available from the U.S. Government Printing Office, Washington D. C. 20402. Order by Catalog No. 127,19/2:W29/2, Stock No. S/N 24003-0027.)
  - c. "Flow Measurement in Open Channels and Closed Conduits," U.S. Department of Commerce, National

Bureau of Standards, NBS Special Publication 484, October 1977, 982 pp. (Available in paper copy or microfiche from National Technical Information Services (NTIS) Springfield, VA 22151. Order by NTIS No. PB-273-5ST.)

- d. "NPDES Compliance Sampling Manual," U.S. Environmental Protection Agency, Office of Water Enforcement. Publication MCD-51, 1977, 140 pp. (Available from the General Services Administration (8FFS), Centralized Mailing Lists Services, Building 41, Denver Federal Center, Denver, CO 80225.)
3. Monitoring must be conducted according to United States Environmental Protection Agency test procedures approved under Title 40, Code of Federal Regulations (CFR), Part 136, "Guidelines Establishing Test Procedures for Analysis of Pollutants Under the Clean Water Act" as amended, unless other test procedures have been specified in this Order.
4. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Health Services or a laboratory approved by the Executive Officer.
5. Monitoring results must be reported on discharge monitoring report forms approved by the Executive Officer.
6. If the discharger monitors any pollutants more frequently than required by this Order, using test procedures approved under 40 CFR, Part 136, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharger's monitoring report. The increased frequency of monitoring shall also be reported.
7. The discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order. Records shall be maintained for a minimum of five years from the date of the sample, measurements, report or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board Executive Officer.

8. Records of monitoring information shall include:
  - a. The date, exact place, and time of sampling or measurements;
  - b. The individual(s) who performed the sampling or measurements;
  - c. The date(s) analyses were performed;
  - d. The individual(s) who performed the analyses;
  - e. The analytical techniques or method used; and
  - f. The results of such analyses.
9. All monitoring instruments and devices which are used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy.
10. The discharger shall report all instances of noncompliance not reported under Reporting Requirement D.6 of this Order at the time monitoring reports are submitted. The reports shall contain the information listed in Reporting Requirement D.8.
11. The monitoring reports shall be signed by an authorized person as required by Reporting Requirement D.9.
12. A composite sample is defined as a combination of at least eight sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24 hour period. For volatile pollutants, aliquots must be combined in the laboratory immediately before analysis. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically.
13. A grab sample is an individual sample of at least 100 milliliters collected at a randomly selected time over a period not exceeding 15 minutes.
14. Sampling and analysis shall, at a minimum, be conducted in accordance with Article 6 of California Code of Regulations, Title 22, Division 4, Chapter 3 (Reclamation Criteria).

**B. EFFLUENT MONITORING**

1. The discharge from the treatment plant to the disposal area shall be monitored as follows:

Monitoring and Reporting  
Program No. 93-69

-4-

Determination	Unit	Sample Type	Sampling Frequency	Reporting Frequency
Flowrate	gpd	Continuous	Daily	Semiannual
Biochemical Oxygen Demand (5-Day @ 20° C)	mg/L	Grab	Quarterly*	Semiannual
Total Suspended Solids	mg/L	Grab	Quarterly*	Semiannual
pH	mg/L	Grab	Quarterly*	Semiannual
Total Dissolved Solids	mg/L	Grab	Semiannual	Semiannual
Chloride	mg/L	Grab	Semiannual	Semiannual
Sulfate	mg/L	Grab	Semiannual	Semiannual
Iron	mg/L	Grab	Semiannual	Semiannual
Manganese	mg/L	Grab	Semiannual	Semiannual
Boron	mg/L	Grab	Semiannual	Semiannual
Fluoride	mg/L	Grab	Semiannual	Semiannual

Note: GPD = gallons per day  
mg/L = milligrams per liter

- \* The discharger shall increase the sampling frequency from quarterly to monthly whenever the monitoring data indicates a violation of the daily maximum limit for either biochemical oxygen demand, total suspended solids or pH limit as specified by Discharge Specification B.1 of this Order. The monthly monitoring shall continue until the discharger achieves compliance with these limitations for two consecutive months. After compliance is achieved, the discharger shall resume sampling at the quarterly frequency.

C. GROUND WATER MONITORING

The following shall constitute the ground water monitoring program:

Determination	Unit	Sample Type	Sampling Frequency	Reporting Frequency
Total Dissolved Solids	mg/L	Grab	Annual	Annual
Nitrate (as NO <sub>3</sub> )	mg/L	Grab	Annual	Annual

D. POTABLE WATER SUPPLY

The following shall constitute the potable water supply monitoring program:

Determination	Unit	Sample Type	Sampling Frequency	Reporting Frequency
Total Dissolved Solids	mg/L	Grab	Annual	Annual
Chloride	mg/L	Grab	Annual	Annual
Sulfate	mg/L	Grab	Annual	Annual

E. STORAGE FACILITIES

When storage facilities are in use, dissolved oxygen concentrations shall be determined at least weekly on grab samples taken at the surface and bottom, not later than 9:00 a.m., and reported semiannually.

F. SEWAGE SOLIDS

A daily log of the quantity of sludge hauled from the treatment plant site and the final point of sludge disposal shall be reported semiannually.

G. REPORTING

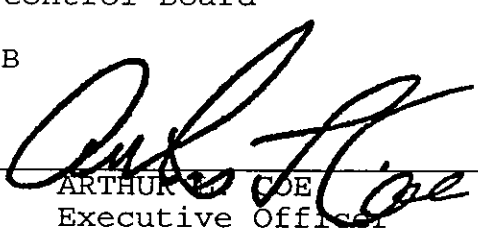
Monitoring reports shall be submitted to the Executive Officer in accordance with the following schedule:

<u>Reporting Frequency</u>	<u>Report Period</u>	<u>Report Due</u>
Semiannual	January-June	July 30
	July-December	January 30
Annual	January-December	January 30

Monitoring reports shall be submitted to:

California Regional Water Quality Control Board  
San Diego Region  
9771 Clairemont Mesa Blvd., Suite B  
San Diego, CA 92124

Ordered by: \_\_\_\_\_

  
ARTHUR J. COE  
Executive Officer  
September 20, 1993